IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

TRAXCELL TECHNOLOGIES, LLC, Plaintiff, v. HUAWEI TECHNOLOGIES USA INC, ET AL., Defendants.	§ § § § § § § § § §	Case No. 2:17-cv-00042-RWS-RSP (Lead Case)

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Before the Court is the opening claim construction brief of Traxcell Technologies, LLC ("Plaintiff") (Dkt. No. 241, filed on November 6, 2018),[1] the response of Huawei Technologies USA, Inc., Nokia of America Corporation, and Nokia Solutions and Networks Oy (collectively "Defendants") (Dkt. No. 244, filed on November 13, 2018), and Plaintiff's reply (Dkt. No. 249, filed on November 27, 2018). The Court held a hearing on the issues of claim construction and claim definiteness on December 12, 2018. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

[1] Citations to the parties' filings are to the filing's number in the docket (Dkt. No.) and pin cites are to the page numbers assigned through ECF.

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I. BACKGROUND

Plaintiff alleges infringement of three U.S. Patents: No. 8,977,284 (the "'284 Patent"), No. 9,510,320 (the "'320 Patent"), and No. 9,642,024 (the "'024 Patent") (collectively, the "Asserted Patents"). The '284 and '320 Patents are each entitled Machine for Providing a Dynamic Data Base of Geographic Location Information for a Plurality of Wireless Devices and Process for Making Same. The '024 Patent is entitled Mobile Wireless Communications System and Method with Corrective Action Responsive to Communications Fault Detection. The patents are related. They share a common priority claim to an application filed Oct. 4, 2001. And they are related through a chain of continuation applications, and thus share a substantially common specification (otuside of the claim sets).

In general, the Asserted Patents are directed to technology for locating a wireless communications device and then using that location for other applications, such as for improving communications with the wireless device.

The abstracts of the '284 and '320 Patents are identical and provide:

> For a wireless network, a tuning system in which mobile phones using the network are routinely located. With the location of the mobile phones identified, load adjustments for the system are easily accomplished so that the wireless network is not subject to an overload situation. Ideally the location of the mobile phones is accomplished whether the mobile phones are transmitting voice data or not.

The abstract of the '024 Patent provides:

> A mobile device, wireless network and their method of operation provide fault handling in response to detection of a communications fault between a connected mobile device and the communications network. The communications network tracks location of mobile devices and stores performance data of connections between the mobile devices and the network. The performance data is referenced to expected performance data to determine whether a fault exists and a corrective action is suggested when the fault exists.

Claim 1 of the ’284 Patent and Claim 6 of the ’024 Patent, exemplary apparatus and method claims respectively, recite as follows:

> **1.** A wireless network comprising:
> a) at least two wireless devices, each said wireless device communicating via radio frequency signals;
> b) a first computer programmed to perform the steps of:
> 1) locating at least one said wireless device on said wireless network and referencing performance of said at least one wireless device with wireless network known parameters,
> 2) routinely storing performance data and a corresponding location for said at least one wireless device in a memory;
> c) a radio tower adapted to receive radio frequency signals from, and transmit radio frequency signals to said at least one wireless device; wherein said first computer further includes means for receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device;
> d) wherein said radio tower generates an error code based upon operation of said at least one wireless device; and
> e) wherein said first computer is further programmed to,
> 1) receive said error code from said radio tower, and,
> 2) selectively suggest a corrective action of said radio frequency signals of said radio tower in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices based upon said error code, and, whereby said first computer suggests said corrective action in order to improve communication with at least one said wireless device.

> **6.** A method of managing a wireless radio-frequency (RF) network, the method comprising:
> coupling in communication, one or more radio-frequency transceivers and an associated one or more antennas to which the radio-frequency transceiver is coupled to one or more mobile wireless communications devices;
> locating the one or more mobile wireless communications devices according to the radio-frequency communications and generating an indication of a location of the one or more mobile wireless communications devices;
> receiving and storing performance data of connections between the one or more mobile wireless communications devices and the radio-frequency transceiver along with the indication of location;
> referencing the performance data to expected performance data;
> determining at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location;
> receiving an error code from the radio-frequency transceiver;

determining whether the error code indicates a performance issue with respect to the connection between the one or more mobile wireless communications devices and the radio-frequency transceiver; and

determining the at least one suggested corrective action in response to the error code.

II. LEGAL PRINCIPLES

A. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (vacated on other grounds).

"The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). "[I]n all aspects of claim construction, 'the name of the game is the claim.'" *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed.

Cir. 1998)). First, a term's context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim's meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office ("PTO") and the inventor understood the patent. *Phillips*, 415 F.3d at 1317.

However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be "unhelpful as an interpretive resource").

Although extrinsic evidence can also be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are not helpful to a court. *Id*. Extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*. The Supreme Court recently explained the role of extrinsic evidence in claim construction:

> In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be "so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning"). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the "evidentiary underpinnings" of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution."[2] *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). The standards for finding lexicography or disavowal are "exacting." *GE Lighting Solutions*, 750 F.3d at 1309.

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision." *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee's statements in the specification or prosecution history must amount to a "clear and unmistakable" surrender. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); *see also Thorner*, 669 F.3d at 1366 ("The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope."). "Where an applicant's statements are amenable

[2] Some cases have characterized other principles of claim construction as "exceptions" to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002).

to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

C. Definiteness Under 35 U.S.C. § 112, ¶ 2 (pre-AIA) / § 112(b) (AIA)[3]

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 2124. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 2130. As it is a challenge to the validity of a patent, the failure of any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *Id.* at 2130 n.10. "[I]ndefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012).

When a term of degree is used in a claim, "the court must determine whether the patent provides some standard for measuring that degree." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (quotation marks omitted). Likewise, when a subjective term is used in a claim, "the court must determine whether the patent's specification supplies some standard for measuring the scope of the [term]." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005). The standard "must provide objective boundaries for those of skill in the art." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014).

[3] The Court refers to the pre-AIA version of § 112 but understands that there is no substantial difference between definiteness under the pre-AIA version and under the AIA version of the statute.

III. AGREED CONSTRUCTIONS

The parties have agreed to the following constructions set forth in their Joint Claim Construction Chart (Dkt. No. 257).

Term[4]	Agreed Construction
"corrective action" • '284 Patent Claim 1 • '320 Patent Claims 1 and 4	plain and ordinary meaning
"correcting" • '284 Patent Claim 12	plain and ordinary meaning
"radio tower" • '284 Patent Claims 1 and 12	base station transceiver subsystem and associated antenna(s)
"means for receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device" • '284 Patent Claim 1	35 USC § 112, ¶ 6 **function**: receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device **structure**: the algorithm disclosed in Fig. 38-A, Fig. 38-B, and Fig. 38-C and described at col. 54, line 21 through col. 55, line 41

[4] For all term charts in this order, the claims in which the term is found are listed with the term but: (1) only the highest-level claim in each dependency chain is listed, and (2) only asserted claims identified in the parties' Joint Claim Construction Chart (ECF No. 257) are listed.

Term[4]	Agreed Construction
"means for receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower in order to improve communication with said wireless devices" • '284 Patent Claim 12[5]	35 USC § 112, ¶ 6 **function**: receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower in order to improve communication with said wireless devices **structure**: the algorithm disclosed in Fig. 38-A, Fig. 38-B, and Fig. 38-C and described at col. 54, line 21 through col. 55, line 41

Having reviewed the intrinsic and extrinsic evidence of record, the Court notes one discrepancy; namely, the "means for receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower in order to improve communication with said wireless devices" language is not found in any claim of the '284 Patent.

Accordingly, the Court adopts the agreed constructions for: (1) "corrective action," (2) "correction," (3) "radio tower," and (4) "means for receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device." The Court declines to adopt the agreed construction for "means for receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower in order to improve communication with said wireless devices."

IV. CONSTRUCTION OF DISPUTED TERMS

To begin, the Court is obliged to construe the terms in dispute. Plaintiff contends that Defendants must show construction of a term "is necessary to decide [a] specific and concrete

[5] The parties identify this as a Claim 1 limitation in their Amended Joint Claim Construction Chart, Dkt. No. 255 at 2 and in their later Joint Claim Construction Chart, Dkt. No. 257 at 2. This was identified as a Claim 12 limitation in their original Joint Claim Construction Chart, Exhibit A, Dkt. No. 252-1 at 3–5. The language of the limitation most closely tracks that of Claim 12.

infringement or invalidity dispute." Dkt. No. 241 at 3. Plaintiff misstates the law. And Plaintiff's contention runs counter to the Court's established practice. It is true that the Court need not rewrite every claim term in construing a claim. The Federal Circuit has stated as much:

> The *Markman* decisions do not hold that the trial judge must repeat or restate every claim term in order to comply with the ruling that claim construction is for the court. Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.

United States Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997). Thus, the Court's claim construction obligations do not extend to claim terms that are not disputed. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) ("[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy"). And while the Court may require the parties to show an actual controversy, the Court need not require the parties to muster their invalidity and infringement evidence and present their case theories in order to establish that a dispute exists. Indeed, the Federal Circuit effectively rejected making such an approach mandatory. *Id*. (rejecting a rule requiring the completion of discovery before claim construction). The Court has not adopted such an approach here. Indeed, the Court ordered the parties to comply with the Court's Rule of Practice for Patent Cases in bringing their claim-construction disputes to the Court. Docket Control Order, Dkt. No. 183. These Patent Rules do not require the showing advocated by Plaintiff.

Ultimately, "[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). And this duty extends to determining whether the scope of the claim is reasonably certain. *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014) ("[W]e read § 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and

prosecution history, inform those skilled in the art about ***the scope of the invention*** with reasonable certainty" (emphasis added)); *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012) ("indefiniteness is a question of law and in effect part of claim construction"); *Cox Communs., Inc. v. Sprint Commun. Co. LP*, 838 F.3d 1224, 1288–89 (Fed. Cir. 2016) ("an indefiniteness analysis under 35 U.S.C. § 112, ¶ 2 is 'inextricably intertwined with claim construction'" (quoting *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1379 (Fed. Cir. 1999))).

While the Court appreciates Plaintiff's concern for judicial resources, it rejects Plaintiff's position that "[p]atent law should not require courts to expend judicial resources in trying to determine alleged claim-construction disputes under the guise of considering indefiniteness if the claim-construction dispute does not impact whether infringement exists, the prior art invalidates the claim, or the claim fails to comply with the written description, enablement, or best mode requirements." Dkt. No. 241 at 3. It is axiomatic that one cannot infringe an invalid claim. An indefinite claim is invalid. Therefore, the issue of indefiniteness of an asserted claim is central to the issue of infringement. Such an issue, when presented, must be resolved by the Court. Indeed, the Court specifically ordered the parties to "include any arguments related to the issue of indefiniteness in their *Markman* briefing." This "[i]n lieu of early motions for summary judgment." Docket Control Order, Dkt. No. 183 at 5.

Accordingly—and with respect to every term in dispute—the Court rejects Plaintiff's argument that the Court should not construe the claims—or rule on their indefiniteness—because Defendants have not proven there is "specific and concrete infringement or invalidity dispute" to be resolved by the claim construction. The Court further denies Plaintiff's request for "separate briefing" on the issue of indefiniteness. Dkt. No. 241 at 12.

A. "first computer" and "computer"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"first computer" • '284 Patent Claims 1, 12 • '320 Patent Claims 1, 4	first computer	same first computer
"computer" • '024 Patent Claims 1, 11, 17	computer	same computer

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: Defendants' proposed construction is improper as it defines the term using the term and suggests that "same" has no meaning else "same computer" and "computer" could not mean the same thing. Dkt. No. 241 at 7.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '284 Patent figs.9, 29, col.16 ll.28–41.

Defendants respond: The claims at issue involve a computer programmed to take certain action. For a given claim, for each programmed action, it is the same computer that is programmed to take the action. That is, where "first computer" is recited in the claims, subsequent reference to "the first computer" or "said first computer" refers to the same computer. Likewise, where "computer" is recited in the claims, subsequent reference to "the computer" or "said computer" refers to the same computer. This is the plain meaning of the claim terms. It is also the meaning explained in prosecution of the '284 Patent, where the applicant distinguished prior art that disclosed use of multiple computers. Thus, the "computer" and "first computer" of the patent is different from a "system" that may comprise multiple computers. Dkt. No. 244 at 12–15.

In addition to the claims themselves, Defendants cite the following **intrinsic evidence** to support their position: ’284 Patent fig.29; ’284 Patent File Wrapper September 28, 2012 Amendment and Response (Defendants’ Ex. 2, Dkt. No. 244-3).

Plaintiff replies: The Asserted Patents expressly contemplate multiple computers, given that they describe “individual computers” and a “LAN.” During prosecution of the ’284 Patent, the applicant simply stated that “first computer” and “computer” does not include a “second computer,” which is a separate claim limitation. Dkt. No. 249 at 1–2.

Plaintiff cites further **intrinsic evidence** to support its position: ’284 Patent col.47 ll.50–55; ’284 Patent File Wrapper September 28, 2012 Amendment and Response (Defendants’ Ex. 2, Dkt. No. 244-3).

Analysis

It appears that the underlying issue in dispute is whether the “first computer” and “computer” of the claims may be a system of multiple computers. They may not. The terms refer to a single computer.

To begin, references to a claim term following a first reference to the term refer to the same term. That is, a subsequent reference to a term refers to its antecedent basis. Here, references to “the” or “said” computer or first computer following a first reference to “a” computer or first computer refer to the same computer or same first computer as Defendants contend. This is the plain meaning of the claim language and is readily apparent without construction.

The “computer” or “first computer” in question here is a single computer. This was made clear during prosecution of the ’284 Patent. The patent applicant clearly distinguished the location/performance computer of the claims from location/performance systems of the prior art in that the computer of the claims was a single computer whereas the prior art included a second

computer. For instance, the applicant distinguished the claimed invention ("*Reed*") from a prior-art reference ("*Andersson*"):

> While ***Andersson requires*** an operative connection with the wireless device (***in addition to a second computer***** requiring additional hardware and software) in order to improve communication, ***Reed requires only a first computer*** to reference the location and performance data for the wireless device, and then adjust radio tower to improve communication.

'284 Patent File Wrapper September 28, 2012 Amendment and Response at 16–17 (emphasis added), Dkt. No. 244-3 at 17–18. Applicant repeated this single-versus-multiple-computer distinction:

> ***Reed's invention for it[s] functionality requires only "a first computer"***. ***Andersson,*** on the other side, ***cannot provide a location for the phone, without a second computer in the phone***. *Andersson* requires that the mobile device contain special equipment (first computer and second computer, and communication with a mobile device) in order to improve communication . . . .
>
> ***Reed offers a single computer***, containing location and performance information about all wireless devices on the wireless communications network (***without the need for*** special hardware in the phone, ***second computers***, or a two way tuning communication with the wireless device).

Id. at 36–37 (emphasis added), Dkt. No. 244-3 at 37–38. The "computer" and "first computer" are single computers.[6] This does not preclude a "second computer" in the accused instrumentality, so long as a single computer performs the recited functions of the "computer" or "first computer." *See, e.g.*, '284 Patent Claims 9 and 12 (reciting a "second computer").

The Court understands the patent-applicant's prosecution-history statements, that the claimed invention does not require a feature required by a prior-art reference, to mean that the prior-art feature does not satisfy a particular limitation of a pending claim. During prosecution of the '284

[6] Claim 17 of the '024 Patent recites both "the computer system" and "the computer." *See, e.g.*, '024 Patent col.131 at ll.16, 28. The Court understands that "computer" and "computer system" are used synonymously in Claim 17 to refer to a single computer rather than a system of multiple computers.

Patent, the patent applicant ostensibly distinguished the prior art on the grounds that the prior art "requires" a limitation not "required" by the claimed invention. The context of these statements is that of a patent applicant responding to a patent-examiner's office action stating that the prior art discloses the limitations of the pending claims. *See, e.g.*, *id*. at 11 (noting the claims "were rejected under 35 U.S.C. § 103(a) as being upatenable over … *Andersson* … in view of … *Steer*"). In this context, the patent applicant was arguing that the particular claim limitation at issue is not satisfied by that feature required by the prior art. For example, the applicant argued that *Andersson* does not satisfy the "first computer" limitation because it does not disclose a single computer that provides the location/performance functions. Rather, *Andersson* requires two computers (a first and a second). Plaintiff suggested at oral argument that the patent-applicant's prosecution-history distinction was that the claimed invention was not as limited as *Andersson*. For example, under Plaintiff's suggestion, the "first computer" does not "require" two computers as in *Andersson*, but it may encompass two computers as in *Andersson*. That is, the "first computer" is broader than the location/performance computers in the prior art used by the examiner to reject the claims. But this ignores the context of the prosecution history—that the applicant was arguing that the prior-art references did not teach specific limitations of the claims. The patent applicant was arguing that the prior art did not disclose the limitations of the pending claims, not that the limitations were broader than that disclosed by the prior art.[7]

The Court rejects Plaintiff's argument that the '284 Patent teaches a multi-computer location/performance computer. At oral argument, Plaintiff argued that the location/performance "first computer" or "computer" of the claims may be multiple computers, relying on the Patent's

[7] This understanding applies also to the prosecution-history statements regarding the "performance data" and "location" terms in dispute.

disclosure: "the components contained within the current invention may reside within the same physical hardware, or the components may reside outside the physical hardware." '284 Patent col.38 ll.15–18. This disclosure does not suggest interpreting the patent-applicant's prosecution-history statements that the location/performance computer is a "single" computer to mean that the single computer may in fact be multiple computers. Rather, it simply suggests that the various components of the invention may or may not be collected together within the same physical piece of hardware.

Accordingly, the Court construes "first computer" in Claims 1 and 12 of the '284 Patent and Claims 1 and 4 of the '320 Patent and "computer" in Claims 1, 11, and 17 of the '024 Patent as follows:

- "first computer" means "first single computer";
- "computer" means "single computer."

B. "performance data"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"performance data" • '284 Patent Claims 1, 12 • '320 Patent Claims 1, 4 • '024 Patent Claims 1, 6, 11, 17	no construction necessary	metric regarding performance not generated by the wireless communications device

The Parties' Positions

Plaintiff submits: Both "performance" and "data" are readily understood without construction. Dkt. No. 241 at 7–8.

Defendants respond: During prosecution of the '284 Patent, the applicant disclaimed "performance data" that was generated by the wireless communication device. The applicant did

this to overcome rejections based on prior-art references disclosing performance data generated by wireless communication devices. Dkt. No. 244 at 15–17.

In addition to the claims themselves, Defendants cite the following **intrinsic evidence** to support their position: '284 Patent File Wrapper September 28, 2012 Amendment and Response (Defendants' Ex. 2, Dkt. No. 244-3).

Plaintiff replies: The applicant's prosecution-history statements did not disclaim use of performance data generated by a wireless communication device. Rather, the applicant noted a distinction between the claims and the prior art in that the computer of the claims does not receive the performance data directly from the wireless device as it does in the prior art. Dkt. No. 249 at 2–3.

Plaintiff cites further **intrinsic evidence** to support its position: '284 Patent File Wrapper September 28, 2012 Amendment and Response (Defendants' Ex. 2, Dkt. No. 244-3).

Analysis

The issue in dispute is whether the "performance data" of the claims may be generated or determined by the wireless communications device. It may not.

The "performance data" of the claims is not determined by the wireless communication device. This was made clear during prosecution of the '284 Patent. The applicant clearly distinguished performance data of the claims from performance data of the prior art in that the performance data of the claims did not originate with the wireless communication device as it did in the prior art. For instance, the applicant distinguished the claimed invention ("*Reed*") from a prior-art reference ("*Andersson*") that disclosed use of a specific performance datum ("carrier-to-interference ratio" or "CIR"):

> *Andersson* shows a mobile station (a second computer) which contains a ***"carrier-to-interference ratio***[] ***detector" contained within the mobile station itself*** (Fig. 3,

> #100). *Andersson* ***teaches away from the possibility of the CIR being determined by the first computer***. In *Andersson's* world the CIR must be detected by *Andersson's* mobile station, and then transmitted via a special dedicated signal to the *Andersson's* specially equipped base station. . . .
>
> In *Andersson's* world, ***the CIR must be determined by his mobile station*** and then transmitted to the base station. *Andersson's* first computer cannot reference the performance data of a wireless device, without receiving said performance date from his mobile station MS1. ***Reed does not require the extra steps or equipment required by Andersson***, to send and receive performance data between the base station and the wireless device.

'284 Patent File Wrapper September 28, 2012 Amendment and Response at 26–27 (emphasis added), Dkt. No. 244-3 at 27–28. The applicant further explained: "Reed's first computer can improve the radio frequency communication ***without*** . . . ***receiving the CIR from the wireless device by any means***." *Id*. at 23, Dkt. No. 244-3 at 24 (emphasis added). That is, the prior art, unlike the claimed invention, included equipment and steps for determining the performance data at the wireless device. The patent applicant distinguished the prior art by noting that the claimed performance data is different—it does not come from the wireless device by any means.

The Court declines to rewrite "performance data" as "metric regarding performance" as Defendants suggest. It is unclear whether Defendants intend a meaningful difference between these terms and Defendants have not provided any reason why "metric regarding performance" is any clearer than "performance data."

Accordingly, the Court construes "performance data" as follows:

- "performance data" means "performance data that is not determined by the wireless communications device."

C. "location"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"location" • '284 Patent Claims 1, 12 • '320 Patent Claims 1, 4 • '024 Patent Claims 1, 6, 11, 17	no construction necessary	location, excluding grid positioning

The Parties' Positions

Plaintiff submits: "Location" is readily understood without construction. Defendants' proposed negative limitation is not justified by the intrinsic evidence. Dkt. No. 241 at 9–10.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '284 Patent, at [54] Title, figs.11–22, 27–28, 33–35, 39–41, 53–56, col.6 ll.15–34, col.7 ll.6–11, col.7 ll.46–61, col.7 l.62 – col.8 l.8, col.16 ll.28–41, col.19 ll.19–24, col.30 ll.49–54, col.41 ll.14–22, col.55 ll.57–60.

Defendants respond: While "location" is readily understandable, the applicant disclaimed grid positioning during prosecution of the '284 Patent. Specifically, the applicant distinguished a prior-art grid-pattern location system to overcome a prior-art rejection. The "location" of the claims is not simply geographic data, which encompasses more than location. Dkt. No. 244 at 17–20.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position: **Intrinsic evidence**: '284 Patent col.5 l.5 – col.6 l.4, col.6 ll.15–34, col.7 l.46 – col.8 l.8, col.16 ll.28–31, col.29 ll.33–34; '284 Patent File Wrapper September 28, 2012 Amendment and Response (Defendants' Ex. 2, Dkt. No. 244-3), December 12, 2012 Office Action (Defendants' Ex. 4, Dkt. No. 244-5); U.S. Patent No. 6,845,246 ("*Steer*") (Defendants' Ex.

3, Dkt. No. 244-4). **Extrinsic evidence**: Dictionary.com, "geography"[8] (Defendants' Ex. 5, Dkt. No. 244-6).

Plaintiff replies: Defendants' proposed construction should be rejected because the applicant's prosecution-history statements were about "grid pattern" rather than "grid positioning." And the "grid pattern" in these statements referred to "mapping of power levels to a geographic grid." Dkt. No. 249 at 3–4.

Analysis

The issue in dispute is whether the "location" of the claims includes "grid positioning." With the understanding that the "grid positioning" term proposed by Defendants is the same as the grid-pattern positioning explained by the patent applicant during prosecution of the '284 Patent, the claimed "location" excludes grid positioning. The parties, and the Court, agree that this does not exclude location as a point comprising a latitude and longitude.

The "location" of the claims is something other than merely a position in a grid pattern. During prosecution of the '284 Patent, the patent applicant clearly distinguished the claimed invention from prior art that used position in a grid pattern as the location. A prior-art reference ("*Steer*") discloses using a mobile's location to set the transmit power level of mobile device. Steer discloses using "locations in a roughly grid pattern throughout the coverage area." '284 Patent File Wrapper September 28, 2012 Amendment and Response at 50, Dkt. No. 244-3 at 51. The patent applicant distinguished the claimed invention ("*Reed*") from the prior-art *Steer* in that "Reed teaches a first computer that can 'suggest corrective action for said radio tower' ***without the limitation of a 'grid pattern***.'" *Id*. (emphasis added). That is, the "location" of the claimed invention is not merely a position in a grid pattern.

[8] https://www.dictionary.com/browse/geography

Accordingly, the Court construes "location" as follows:

- "location" means "location that is not merely a position in a grid pattern."

D. "one of the radio-frequency transceivers"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"one of the radio-frequency transceivers" • '024 Patent Claims 11, 17	no construction necessary	indefinite

The Parties' Positions

Plaintiff submits: It is not appropriate to address indefiniteness in a claim-construction proceeding. Indefiniteness is an issue for summary judgment. Defendants cannot prove by clear and convincing evidence that any of the challenged claims "are insolubly ambiguous and no narrowing construction can be properly adopted." Dkt. No. 241 at 10–13.

Defendants respond: Plaintiff waived its argument on indefiniteness by not raising an argument in its opening brief. The term "one of the radio-frequency transceivers" lacks antecedent basis in the claims, and therefore renders the claims indefinite. Specifically, the claims recite "multiple radio-frequency transceivers" but it is uncertain which of these multiple transceivers is meant by later claim-recitations of "one of the radio-frequency transceivers." Dkt. No. 244 at 20–22.

Plaintiff replies: It is not required to address indefiniteness until the issue is raised. The claim language at issue simply limits the multiple radio-frequency transceivers to one transceiver. Dkt. No. 249 at 4.

Analysis

The issue in dispute is whether the meaning of "one of the radio-frequency transceivers" in the claims is reasonably certain. In the context of the surrounding claim language, the meaning of "one of the multiple radio-frequency transceivers" is reasonably certain.

Claim 11 of the '024 Patent, reproduced here and annotated by the Court, recites multiple radio-frequency transceivers for communication with one or more wireless devices. A computer is configured to receive an indication that one of the transceivers ("a particular one of the radio-frequency transceivers") has faulty communication. The computer takes corrective action on the transceiver ("the particular radio-frequency transceiver') to remedy the fault. The one or more wireless devices are configured to transmit an indication of performance of the communication with the transceiver ("the particular one of the multiple radio-frequency transmitters") and this indication of performance of the transceiver is the indication that one of the transceivers ("the particular one of the radio-frequency transceivers") has faulty communication. While inartfully drafted, the meaning is reasonably certain. The

> **11**. A system including:
> ***multiple radio-frequency transceivers*** and associated multiple antennas to which the associated radio-frequency transceivers are coupled, wherein the multiple radio-frequency transceivers are configured for radio-frequency communication with ***one or more mobile wireless communications devices***; and
> a computer coupled to the multiple radio-frequency transceivers that receives and stores an indication of a location of the one or more mobile wireless communications devices, wherein the computer receives ***an indication*** that indicates that communication between ***a particular one of the radio-frequency transceivers*** and the one or more mobile wireless communications devices is faulty, wherein the computer takes corrective action on ***the particular radio-frequency transceiver*** to attempt to remedy the fault, wherein the one or more mobile wireless communications devices transmit ***an indication*** of performance of communication with ***the particular one of the multiple radio-frequency transmitters***, and wherein the computer is further programmed to receive ***the indication of performance from one of the multiple radio-frequency transceivers*** as ***the indication*** that the communication between ***the particular one of the radio-frequency transceivers*** and the one or more mobile wireless communications devices is faulty, wherein the computer further receives and stores performance data of connections between the one or more mobile wireless communications devices and the multiple radio-frequency transceivers along with the indication of location, wherein the computer references the performance data to expected performance data, and wherein the computer determines at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location.

system includes: (1) a computer to receive an indication of a faulty-communication transceiver ("a particular one of the radio-frequency transceivers"), (2) a mobile device to send an indication of performance of communiction of the transceiver ("the particular one of the multiple radio-frequency transmitters") that serves as the indication of the faulty communicaton, and (3) the computer to provide corrective action on the transceiver ("the particular radio-frequency transceiver").

Claim 17, reproduced here and annotated by the Court, recites multiple radio-frequency transceivers. A computer system receives an indication that one of the transceivers has faulty communication. The indication is from the transceiver ("a first one of the multiple radio-frequency transceivers") and indicates that the transceiver ("the first one of the radio-frequency transceivers") has faulty communication. In response to this indication, the computer system takes corrective action on "the particular radio-frequency transceiver." While inartfully drafted, the meaning is reasonably certain. The method identifies a transceiver with faulty communication ("a first one of the multiple radio-frequency transceivers") and

17. A method of managing a wireless radio-frequency (RF) network, the method comprising:
coupling in communication, ***multiple radio-frequency transceivers*** and associated multiple antennas to which the radio-frequency transceivers are coupled, wherein the multiple radio-frequency transceivers are configured for radio-frequency communication one or more mobile wireless communications devices;
locating the one or more mobile wireless communications devices according to the radio-frequency communication and generating an indication of a location of the one or more mobile wireless communications devices;
receiving and storing the indication of location by a computer system;
the computer system receiving and storing performance data of connections between the one or more mobile wireless communications devices and the multiple radio-frequency transceivers along with the indication of location;
the computer system receiving ***an indication*** of performance from ***a first one of the multiple radio-frequency transceivers*** that indicates that communication between ***the first one of the radio-frequency transceivers*** and the one or more mobile wireless communications devices is faulty;
responsive to receiving ***the indication*** that the communication is faulty, the computer taking corrective action on ***the particular radio-frequency transceiver*** to attempt to remedy the fault;
the computer referencing the performance data to expected performance data; and
the computer determining at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location.

attempts to remedy the fault on that transceiver ("the particular radio-frequency transceiver").

Accordingly, the Court determines the Defendants have not proven that any claim is indefinite for including "one of the radio-frequency transceivers."

E. "referencing performance"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"referencing performance" • '284 Patent Claim 1	no construction necessary	indefinite

The Parties' Positions

Plaintiff submits: It is not appropriate to address indefiniteness in a claim-construction proceeding. Indefiniteness is an issue for summary judgment. Defendants cannot prove by clear and convincing evidence that any of the challenged claims "are insolubly ambiguous and no narrowing construction can be properly adopted." Dkt. No. 241 at 10–13.

Defendants respond: Plaintiff waived its argument on indefiniteness by not raising an argument in its opening brief. The term "referencing performance" is used in the claim in the context of a computer programmed to perform the step of referencing performance. But it is not reasonably certain what "referencing" performance means. It is not "storing" or "receiving" performance data, since both are separately recited in the claim. And the term does not have particular meaning in the art. Dkt. No. 244 at 22–23.

Plaintiff replies: It is not required to address indefiniteness until the issue is raised. The '284 Patent includes a description of referencing performance at column 36, line 25. Dkt. No. 249 at 4.

Plaintiff cites further **intrinsic evidence** to support its position: '284 Patent col.36 l.25.

Analysis

The issue in dispute is whether the meaning of "referencing performance" in the claims is reasonably certain. It is.

"Referencing performance" plainly means "referring to performance." Defendants' argument is not persuasive. While "referencing performance" may be broad, and Defendants may not be able to now imagine everything that might conceivably fall within the scope of the limitation, the meaning is not uncertain. The '284 Patent repeatedly uses "reference" and "referencing" as "refer to" and "referring to." *See, e.g.*, '284 Patent col.30 ll.44–48 (noting various types of sectors/antennas and stating that software "should first reference this 'type' and then choose which type of [location determining] methods to use"), col.36 ll.25–27 (noting the invention is directed to "calculating and displaying wireless device locations and wireless network service problems with reference to related wireless devices on the said wireless network"), col.36 ll.29–32 (noting the "invention uses a method(s) for locating wireless devices and referencing their location and performance with wireless network known parameters"), col.36 ll.36–40 ("the present invention is directed to a computational machine and process for … detecting and referencing wireless network errors with specific geographical location information of the affected wireless devices"). Simply, "referencing" is used in the Patent according to its plain and ordinary meaning, "referring to."

Accordingly, the Court determines the Defendants have not proven that Claim 1 of the '284 Patent is indefinite for including "referencing performance." The Court construes "referencing performance" as follows:

- "referencing performance" means "referring to performance."

F. "in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices . . . in order to improve communication with at least one said wireless device"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices . . . in order to improve communication with at least one said wireless device" • '284 Patent Claim 1	not indefinite	indefinite

The Parties' Positions

Plaintiff submits: It is not appropriate to address indefiniteness in a claim-construction proceeding. Indefiniteness is an issue for summary judgment. Defendants cannot prove by clear and convincing evidence that any of the challenged claims "are insolubly ambiguous and no narrowing construction can be properly adopted." Dkt. No. 241 at 10–13.

Defendants respond: Plaintiff waived its argument on indefiniteness by not raising an argument in its opening brief. It is not clear from the claim language which wireless device of the "at least two wireless devices" is restricted. Further, it is not clear if the restricted device is the same as the "at least one said wireless device" for which communications are improved. Dkt. No. 244 at 23–24.

Plaintiff replies: It is not required to address indefiniteness until the issue is raised. One skilled in the art would understand this term. Dkt. No. 249 at 4–5.

Analysis

The issue in dispute is whether the meaning of "in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices . . . in order to improve communication with at least one said wireless device" in the claims is reasonably certain. It is not.

The Court rejects Defendants' argument that the claim is indefinite because it does not specifically identify which of "at least one of said at least two wireless devices" is the one for which processing of radio frequency signals is restricted. Such specificity is not required to understand Claim 1 of the '284 Patent. There are multiple wireless devices, and the radio-frequency processing for at least one of them is restricted.

The Court agrees with Defendants, however, that it is not reasonably certain which wireless devices experience the communication improvement stemming from the restriction. Claim 1 of the '284 Patent, reproduced here and annotated by the Court, includes various references to "said wireless device," "at least one said wireless device," "said at least one wireless device," and "at least one of said at least two wireless devices." Is the target of the communicaton improvement one of the restricted devices? Is it any of the devices?

1. A wireless network comprising:
a) ***at least two wireless devices***, each said wireless device communicating via radio frequency signals;
b) a first computer programmed to perform the steps of:
1) locating ***at least one said wireless device*** on said wireless network and referencing performance of ***said at least one wireless device*** with wireless network known parameters,
2) routinely storing performance data and a corresponding location for ***said at least one wireless device*** in a memory;
c) a radio tower adapted to receive radio frequency signals from, and transmit radio frequency signals to ***said at least one wireless device***; wherein said first computer further includes means for receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device;
d) wherein said radio tower generates an error code based upon operation of ***said at least one wireless device***; and
e) wherein said first computer is further programmed to,
1) receive said error code from said radio tower, and,
2) selectively suggest a corrective action of said radio frequency signals of said radio tower in order to restrict processing of radio frequency signals ***from at least one of said at least two wireless devices*** based upon said error code, and, whereby said first computer suggests said corrective action in order to improve communication with ***at least one said wireless device***.

Is it one of the unrestricted devices? The answer is unclear because of variation in the bold terms above. Of these myriad devices, Plaintiff has not offered any meaning for the "at least one said wireless device" which is the target of the communicaton improvement. At oral argument, Plaintiff was not able to identify any embodiment described in the '284 Patent to inform understanding of Claim 1. Thus, the Court agrees with Defendants that the meaning of the term, and Claim 1 of the '284 Patent, is not reasonably certain.

Accordingly, the Court holds the Defendants have proven that Claim 1 of the '284 Patent is indefinite.

G. '284 Patent Claim 12

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"A machine and process for tuning a wireless network, comprising: . . ." • '284 Patent Claim 12	not indefinite	Indefinite, as directed to both "[a] machine and process for tuning a wireless network," including method steps of using the claimed "machine," e.g., "wherein a user of one of said at least two wireless devices is able to set a no access flag within the memory of said first computer."

The Parties' Positions

Plaintiff submits: It is not appropriate to address indefiniteness in a claim-construction proceeding. Indefiniteness is an issue for summary judgment. Defendants cannot prove by clear and convincing evidence that any of the challenged claims "are insolubly ambiguous and no narrowing construction can be properly adopted." Dkt. No. 241 at 10–13.

Defendants respond: Plaintiff waived its argument on indefiniteness by not raising an argument in its opening brief. Claim 12 is expressly directed to a "machine and process" and is therefore indefinite as mixing process and apparatus claims. The claim includes both apparatus limitations (e.g., wireless devices, first computer) and process limitations (communicating via

radio frequency signals, computer corrects the radio frequency signals of the radio tower). Dkt. No. 244 at 24–25.

Plaintiff replies: Claim 12 is directed to a machine, not a process. The preamble is not limiting and all the claim limitations are machine elements. Dkt. No. 249 at 5.

Analysis

The issue in dispute is whether Claim 12 of the ’284 Patent is indefinite as improperly directed to both an apparatus and a process. It is not. In light of Federal Circuit precedent, Claim 12, though inartfully drafted, is directed solely to a machine.

The preamble’s reference to a “machine and process” is concerning, but not limiting. “Generally, the preamble does not limit the claims.” *Allen Eng’g Corp. v. Bartell Indus.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002). Under Federal Circuit precedent “a preamble is not limiting where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Acceleration Bay, LLC v. Activision Blizzard, Inc.*, 908 F.3d 765, 770 (Fed. Cir. 2018) (quotiation marks and citations omitted). As set forth in more detail below, the body of Claim 12 sets forth a structurally-complete invention that is a machine. The preamble does not provide antecedent basis for any terms in the body of the claim. The preamble is not essential to understanding the claim’s limitations—which are all directed to machine structure. And there is no evidence of record that the preamble was used to distinguish prior art during prosecution of the ’284 Patent. The preamble thus lacks the hallmarks of a limiting preamble under Federal Circuit precedent. *See Catalina Mktg. Int’l v. Coolsavings.com, Inc.*, 289 F.3d 801, 808–09 (Fed. Cir. 2002). Ultimately, the preamble’s recitation of a “machine and process” is not dispositive.

Claim 12, reproduced here and annotated by the Court, recites only machine limitations. Specifically, the claim recites: (1) at least two wireless devices, (2) a first computer, (3) a radio tower, and (4) a second computer. The claim also recites functional language referencing the machine elements, such as "communicating," "generating," and "corrects." The claim further recites that a "a user . . . is able to set a no access flag." Under Federal Circuit precedent, the claim body recites machine elements using functional language to denote structure of the machine rather than actual operation of the machine.

Active functional language is properly used in apparatus claims to denote capability of the apparatus. As the Federal Circuit explained in *Mastermine Software, Inc. v. Microsoft Corp.*, functional language may properly be used to denote structure of machine elements: "[active] verbs represent permissible functional language used to describe capabilities of the [machine elements]." 874 F.3d 1307, 1315–16 (Fed. Cir. 2017). The claim at issue in *Mastermine* includes "a reporting module" that "***presents*** a set of user-selectable database fields," "***receives*** from the user a selection of one or more user-selectable database fields," and "***generates*** a database query." *Id*. at 1315 (emphasis in original). The Federal Circuit explained that while the claim recited active verbs—presents, receives, generates—these "merely claim that the system possesses the

12. A machine and process for tuning a wireless network, comprising:

a) ***at least two wireless devices***, each said wireless device ***communicating*** via radio frequency signals;

b) ***a first computer*** programmed to:

1) routinely identify performance data and a corresponding location for each of said at least two wireless devices;

2) routinely store said performance data and said corresponding location for each of said at least two wireless devices in a memory;

c) ***a radio tower*** adapted to receive said radio frequency signals from and transmit radio frequency signals to said at least two said wireless devices;

d) further including ***a second computer generating*** a status request;

e) wherein ***a user*** of one of said at least two wireless devices ***is able to set a no access flag*** within the memory of said first computer; and

f) wherein said ***first computer*** is programmed to deny the status request from said second computer if said no access flag is set;

wherein said ***first computer*** further includes means for receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower, and, whereby said ***first computer corrects*** the radio frequency signals of the radio tower in order to improve communication with said wireless devices.

recited structure which is capable of performing the recited functions." *Id*. at 1316 (quotation and modificaton marks omitted). According to *Mastermine,* Federal Circuit precedent has consistently approved using functional language to denote machine structure by denoting capability. As examples of such approval, *Mastermine* cites *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367 (Fed. Cir. 2008); *HTC Corp. v. IPCom GmbH & Co., KG*, 667 F.3d 1270 (Fed. Cir. 2012); and *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816 (Fed. Cir. 2016). *Mastermine*, 874 F.3d at 1313–16. In *Microprocessor Enhancement*, claim recitation of a "logic pipeline stage . . . ***performing*** a boolean algebraic evaluation . . . and ***producing*** an enable-write" was deemed "clearly limited to a pipeline processor possessing the recited structure and ***capable*** of performing the recited functions, and is thus not indefinite under *IPXL Holdings*." *Mastermine*, 874 F.3d at 1315 (emphasis in original, quotation marks omitted). In *HTC Corp.*, claim recitation of a "mobile station for use with a network . . . that achieves a handover by: ***storing*** link data . . . ***holding*** in reserve for the link resources . . . ***maintaining*** a storage of the link data . . . ***causing*** the resources . . . to remain held in reserve . . . ***deleting*** the link data . . . and ***freeing*** up the resources" was deemed to "merely establish those functions as the underlying network environment in which the mobile station operates." *Mastermine*, 874 F.3d at 1314–15 (emphasis in original, quotation marks and modificatons omitted). In *Ultimate Pointer*, claim recitation of "an image sensor . . . ***generating*** data" was deemed to be "clear that the 'generating data' limitation reflects the capability of that structure rather than the activities of the user, and do not reflect an attempt to claim both an apparatus and a method, but instead claim an apparatus with particular capabilities." *Mastermine*, 874 F.3d at 1315 (emphasis in original, quotation marks omitted).

The Court understands the functional language in Claim 12 of the '284 Patent, including "communicating," "generating," and "corrects," is used in the same manner as the functional

language in *Microprocessor Enhancement*, *HTC Corp.*, *Ultimate Pointer*, and *Mastermine*: the language denotes the structure of the machine, not actual use of the machine. And recitation that "a user . . . is able to set a no access flag" is facially directed to machine capability rather than to a user actually setting a no access flag using the machine. Simply, the functional language in Claim 12 does not indicate that the claim is directed to both an apparatus and a method. Rather, Claim 12 is directed to an apparatus with particular capabilities. Those capabilities, defined by functional language, denote structure.

Accordingly, the Court holds the Defendants have not proven that Claim 12 of the '284 Patent is indefinite.

V. CONCLUSION

The Court adopts the constructions above for the disputed and agreed terms of the Asserted Patents. The Court further finds that Claim 1 of the '284 Patent is invalid as indefinite. Furthermore, the parties should ensure that all testimony that relates to the terms addressed in this Order is constrained by the Court's reasoning. However, in the presence of the jury the parties should not expressly or implicitly refer to each other's claim construction positions and should not expressly refer to any portion of this Order that is not an actual construction adopted by the Court. The references to the claim construction process should be limited to informing the jury of the constructions adopted by the Court.

SIGNED this 4th day of January, 2019.

ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE